Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1.   (Currently amended) A load balancing system for network nodes, the load balancing system comprising:

a plurality of crossbar devices;

a plurality of queues configured to receive data; and

a load balancer coupled to the plurality of queues and configured to determine an amount of data in each of the plurality of queues and to send the data to specific ones of the plurality of crossbar devices based on the amount of data in each queue[-]:

wherein the system is configured to place each data of the plurality of data in a specific queue of the plurality of queues based on a priority associated with each data; and

wherein the load balancer is configured to detect availability of additional crossbar devices.

Claim 2.   (Original) The load balancing system of claim 1 wherein the plurality of queues comprises a high priority queue and a plurality of non-high priority queues.

Claim 3.   (Currently amended) The load balancing system of claim 2 wherein the load balancer is configured to send[[s]] data to specific crossbar devices of the plurality of crossbar devices based on an amount of data in the high priority queue relative to an amount of data in each of the plurality of non-high priority queues.

Claim 4.   (Currently amended) The load balancing system of claim 2 wherein the load balancer is configured to send[[s]] data to specific crossbar devices in a order that is based on one of the amount of data in the high priority queue and an amount of data in each of the plurality of non-high priority queues.

Claim 5.   (Currently amended) The load balancing system of claim 2 wherein the load balancer is configured to send[[s]] data to specific crossbar devices of the plurality of crossbar devices based on an amount of data in each of the plurality of non-high priority queues relative to an amount of data in the high priority queue.

Claim 6.   (Currently amended) The load balancing system of claim 2 wherein the load balancer is configured to send[[s]] data to specific crossbar devices in a order based on one of an amount of data in the high priority queue and an amount of data in each of the plurality of non-high priority queues.

Claim 7.   (Original) The load balancing system of claim 1 further comprising a capacity indicator identifying the amount of data in each queue.

Claim 8.   (Original) The load balancing system of claim 7 wherein the load balancer is configured to determine the amount data in each queue based on examining the capacity indicator and to transmit data to the plurality of crossbar devices in a predetermined order based on the examination of the capacity indicator.

Claim 9.   (Original) The load balancing system of claim 7 wherein the capacity indicator further indicates an occupancy level based on the amount of data in each queue.

Claim 10.   (Original) The load balancing system of claim 9 wherein load balancer is configured to transmit data to the plurality of crossbar devices in a predetermined order based on various occupancy levels of each queue as indicated by the capacity indicator.

Claim 11.   (Original) The load balancing system of claim 10 wherein the occupancy levels are high, medium, low and empty.

Claim 12.   (Original) The load balancing system of claim 1 wherein each of the queues are divided into a plurality of portions having a corresponding portion indicator for each portion of the queues to identify that data are in a corresponding portion of a queue.

Claim 13.   (Original) The load balancing system of claim 12 wherein the portion indicators are modifiable to indicate various occupancy levels in the queue.

Claim 14.   (Original) The load balancing system of claim 12 wherein the load balancer is configured to transmit data from the plurality of queues to the plurality of crossbar devices in a predetermined order based on the portion indicators.

Claim 15.   (Original) The load balancing system of claim 2 wherein each of the queues are divided into a first portion, a second portion and a third portion.

Claim 16.   (Original) The load balancing system of claim 15 wherein the data received are placed first in the first portion, when the first portion is full, the received data are placed in the second portion and, when the second portion is full, the received data are placed the third portion of the queue.

Claim 17.   (Currently amended) The load balancing system of claim 15 wherein the load balancer is configured to determine, upon determining that data are in the third portion of the queue of the high priority queue[[,]] and to cause[[s]] the data in the high priority queue to be transmitted to all the plurality of crossbar devices that are available when data are in the third portion of the queue of the high priority queue.

Claim 18.   (Currently amended) The load balancing system of claim 15 wherein the load balancer is configured to determine, upon determining that data are only in the first portion of the queue of the high priority queue[[,]] and to cause[[s]] the data in the third portion of the non-high priority queues to be transmitted to all the plurality of crossbar devices that are available when data are only in the first portion of the queue of the high priority queue.

Claim 19.   (Currently amended) The load balancing system of claim 15 wherein the load balancer is configured to determine, upon determining that data are only in the non-high priority queues[[,]] and to cause[[s]] the data in the non-high priority queues to be transmitted to

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all the plurality of crossbar devices that are available when data are only in the non-high priority queues.

Claim 20.   (Currently amended) The load balancing system of claim 15 wherein the load balancer is configured to determine, upon determining that data are only in the high priority queues[[,]] and to cause[[s]] the data in the high priority queues to be transmitted to all the plurality of crossbar devices that are available when data are only in the high priority queues..

Claim 21.   (Currently amended) The load balancing system of claim 15 wherein the load balancer is configured to determine, upon determining that data are in one of the first and second portions of the queue of the high priority queue[[,]] and to cause[[s]] the data in the non-high priority queues to be transmitted to particular predetermined crossbar devices that are available and to cause[[s]] the data in the high priority queue to be transmitted to remaining crossbar devices from the plurality of crossbar devices that are available.

Claim 22.   (Original) The load balancing system of claim 15 further comprising:
a first indicator identifying that data are in the first portion of a queue;
a second indicator identifying that data are in the second portion of a queue; and
a third indicator identifies that data are in the third portion of a queue.

Claim 23.   (Currently amended) The load balancing system of claim 2215 wherein the load balancer is configured to determine, upon determining that the third indicator identifies that data are in the third portion of the queue of the high priority queue[[,]] and to cause[[s]] the data in the non-high priority queues to be transmitted to all the plurality of crossbar devices that are available.

Claim 24.   (Original) The load balancing system of claim 1 wherein the load balancer is configured to detect inoperable crossbar devices.

Claim 25.   (Currently amended) The load balancing system of claim 24 wherein the load balancer is configured to detectin detecting inoperable devices by being configured to

send~~comprises-sending~~ a message to the plurality of crossbar devices and to receive~~receiving~~ a response sent from each of the plurality of crossbar devices that are operating.

Claim 26.   (Currently amended) The load balancing system of claim 24 wherein the load balancer is configured to detect~~in detecting~~ inoperable devices by being configured to send~~comprises sending~~ a message to the plurality of crossbar devices and to determine~~determining~~ if a response sent from each of the plurality of crossbar devices that are operating is within~~based on~~ a predetermined time ~~frame~~.

Claim 27.   (Currently amended) The load balancing system of claim 24 wherein the load balancer is configured to detect availability of additional crossbar devices by being configured to attempt to transmit data to the~~added to the plurality of~~ additional crossbar devices.

Claim 28.   (Currently amended) The load balancing system of claim 27 wherein the load balancer is configured to send~~in detecting additional crossbar devices comprises sending a~~ data to at least one predetermined location and to receive~~receiving~~ a response sent from each of the additional crossbar devices that are added.

Claim 29.   (Currently amended) The load balancing system of claim 27 wherein the load balancer is configured to receive~~in detecting additional crossbar devices comprises receiving a~~ data sent from each of the additional crossbar devices ~~that are added~~and to update an operational list of available crossbar devices.

Claim 30.   (Currently amended) The load balancing system of claim 28~~25~~ wherein the predetermined location is an offset in a shared memory~~from one of the plurality of crossbar devices~~.

Claim 31.   (Original) The load balancing system of claim 1 further comprising a processor coupled to the load balancer.

Claim 32.   (Currently amended) A load balancing method comprising:
receiving a plurality of data;

storing the plurality of data in a plurality of queues, ~~each data of the plurality of data being placed in a specific queue of the plurality of queues based on a priority associated with each data~~;

determining occupancy levels in each of the plurality of queues; ~~and~~

transmitting the data to a plurality of crossbar devices based on the determined occupancy levels in each queue[[.]]; and

determining the availability of additional crossbar devices;

wherein each data of the plurality of data is placed in a specific queue of the plurality of queues based on a priority associated with each data.

Claim 33.   (Original) The load balancing method of claim 32 wherein the plurality of queues comprises a high priority queue and a plurality of non-high priority queues.

Claim 34.   (Original) The load balancing method of claim 33 wherein the occupancy levels in each queue are based on an amount of data in the high priority queue and an amount of data in each of the plurality of non-high priority queues.

Claim 35.   (Currently amended) The load balancing method of claim 33 wherein ~~transmitting the data,~~ the data are transmitted to specific crossbar devices in an order that is based on an occupancy level of the high priority queue and an occupancy level in each of the plurality of non-high priority queues.

Claim 36.   (Original) The load balancing method of claim 32 further comprising dividing the queues into a plurality of portions having a corresponding portion indicator for each portion of the queues to identify that data are in a corresponding portion of a queue.

Claim 37.   (Currently amended) The load balancing method of claim 36 ~~32~~ further comprising modifying the portion indicators to indicate various occupancy levels in the queue.

Claim 38.   (Currently amended) The load balancing method of claim 36̶3̶2̶ wherein t̶r̶a̶n̶s̶m̶i̶t̶t̶i̶n̶g̶ ̶t̶h̶e̶ ̶d̶a̶t̶a̶,̶ the data are transmitted to specific crossbar devices in an order based on the portion indicators.

Claim 39.   (Original) The load balancing method of claim 33 further comprising: dividing each of the queues into a first portion, a second portion and a third portion; and determining if data are in the first, second and third portions of the plurality of queues.

Claim 40.   (Currently amended) The load balancing method of claim 39 wherein t̶h̶e̶ transmitting o̶f̶ the data further comprises transmitting the data in the high priority queue to all the plurality of crossbar devices, upon determining that data are in the third portion of the queue of the high priority queue.

Claim 41.   (Currently amended) The load balancing method of claim 39 wherein t̶h̶e̶ transmitting o̶f̶ the data further comprises transmitting the data in the third portion of the non-high priority queues to all the plurality of crossbar devices, upon determining that data are in the first portion of the queue of the high priority queue.

Claim 42.   (Currently amended) The load balancing method of claim 39 wherein t̶h̶e̶ transmitting o̶f̶ the data further comprises transmitting the data in the non-high priority queues to all the plurality of crossbar devices, upon determining that data are only in the non-high priority queues.

Claim 43.   (Currently amended) The load balancing method of claim 39 wherein t̶h̶e̶ transmitting o̶f̶ the data further comprises transmitting the data in the high priority queues to all the plurality of crossbar devices, upon determining that data are only in the high priority queues.

Claim 44.   (Currently amended) The load balancing method of claim 39 wherein t̶h̶e̶ transmitting o̶f̶ the data further comprises transmitting the data in the non-high priority queues to particular predetermined crossbar devices and transmitting the data in the high priority queue to

remaining crossbar devices from the plurality of crossbar devices, upon determining that data are in one of the first and second portions of the queue of the high priority queue.

Claim 45.   (Currently amended) The load balancing method of claim 32 further comprising detecting an~~one of~~ inoperable crossbar devices and ceasing~~operable crossbar devices and~~ transmitting data to the inoperable crossbar devices~~based on the detecting of one of inoperable crossbar devices and operable crossbar devices~~.

Claim 46.   (Currently amended) The load balancing method of claim 32 further comprising detecting an operational condition of each of the plurality of crossbar devices and transmitting data to the crossbar devices based on the operational condition~~detected~~.

Claim 47.   (Currently amended) The load balancing method of claim 32 further comprising detecting availability of additional crossbar devices by attempting to transmit data to the ~~added to the plurality of crossbar devices and transmitting the data to the detected~~ additional crossbar devices.

Claim 48.   (Cancelled)